

TULSION[®] A-33 OH UPS

STRONG BASE ANION EXCHANGE RESIN TYPE I

TULSION A-33 OH UPS is a specially developed, premium grade, strongly basic anion exchange resin, based on polystyrene matrix, containing quaternary ammonium Type 1 group. It has excellent physical and chemical stability for its use in nuclear industry.

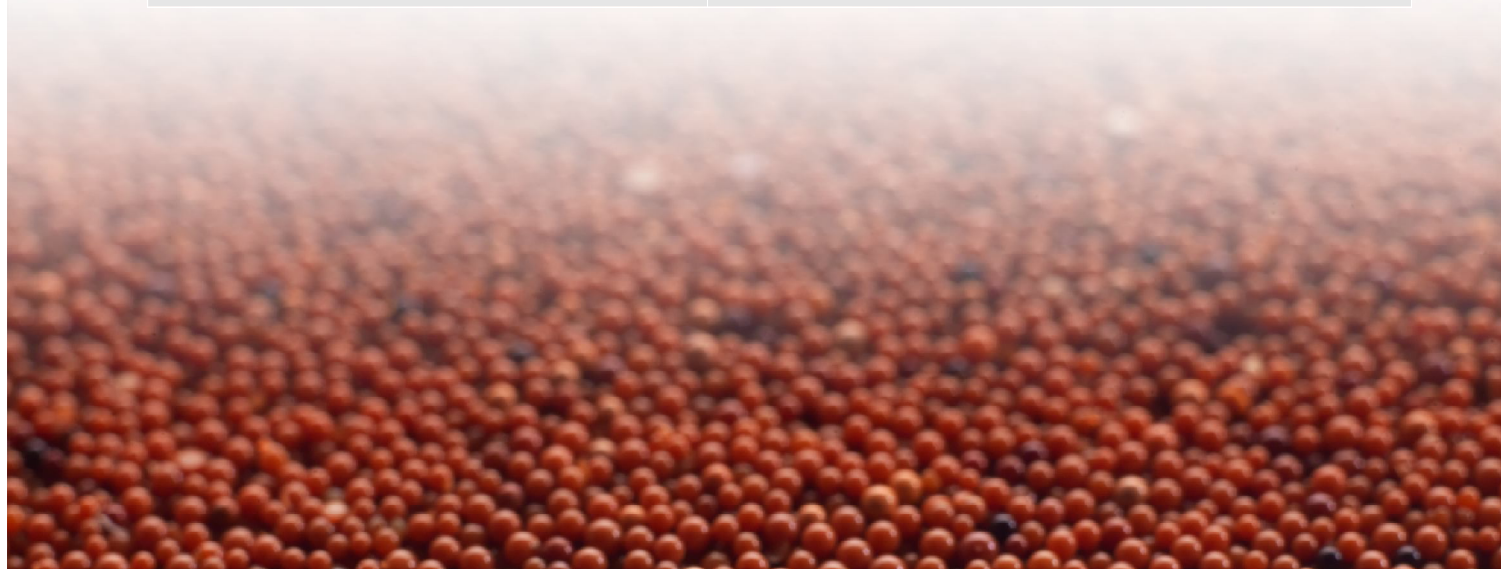
TULSION A-33 OH UPS is primarily used for purification of reactor coolant and moderator in nuclear power station plants to keep corrosion products to the minimum level thus protecting the heat transfer efficiency.

TULSION A-33 OH UPS has special particle size distribution for low pressure drop and better kinetics.

TULSION A-33 OH UPS is manufactured under most stringent quality controls to ensure chloride contents are less than 1%.

TYPICAL CHARACTERISTICS

Type	Gel type strong base anion exchange resin
Matrix structure	Polystyrene copolymer
Functional group	Quaternary ammonium Type I
Physical form	Moist spherical beads
Ionic form	Hydroxide
Screen size USS (wet)	16-40
Particle size	0.4 to 1.2 mm
Uniformity coefficient	1.4 max
Total exchange capacity	1.0 meq/ml min (90% minimum in OH form)
Moisture content	70 ± 3%
Swelling (Approx)	Chloride to Hydroxide : 20%
Backwash settled density	670 to 720 g / l
pH range	0 to 14
Solubility	Insoluble in all common solvents



OPERATING CHARACTERISTICS	
Maximum operating temperature	60°C
Resin bed depth	800 mm
Maximum service flow	60 BV/hr.
Backwash flow rate (for 60 to 70% Expansion)	5 to 10 m ³ /hr/m ² .
Regenerant	NaOH
Regeneration level	40 to 160 g/l
Regenerant concentration	4 to 5%
Regeneration flow rate	5 to 10 m ³ /hr/m ³
Regeneration contact Time	20 to 60 mins.
Slow Rinse	At regeneration flow rate (min. 2BV)
Fast Rinse	At Service flow rate

TESTING :

The sampling and testing of ion exchange resins is done as per standard testing procedures, namely ASTM-D-2187 and IS-7330, 1998.

PACKING :

Super Sack	1000 lit.	Super Sack	35 cft
MS drums	180 lit.	Fiber Drums	7 cft
HDPE lined Bags	25 lit.	HDPE Lined Bags	1 cft

For Handling, Safety and Storage requirements please refer to the individual Material Safety Data Sheets available at our offices.

The data included herein are based on test information obtained by Thermax Limited. These data are believed to be reliable, but do not imply any warranty or performance guarantee. Tolerances for characteristics are per BIS/ASTM. We recommend that the user should determine the performance of the product by testing on his own processing equipment.



Thermax Limited

LENNTECH

info@lennotech.com Tel. +31-152-610-900
www.lennotech.com Fax. +31-152-616-289